

Application No. 10/071,560
Response dated May 2, 2005
Reply to Office Action of April 4, 2005

REMARKS:

Status Of Claims

Claims 1-45 were previously and are currently pending in the application with claims 1, 10, 14, 22, 31, and 39 being independent.

Office Action

In the office action, the Examiner rejected claims 1-45 under 35 U.S.C. 102(e) as being anticipated by Ran, U.S. Patent No. 6,317,686. Applicant respectfully submits that the currently pending claims distinguish the present invention from Ran and the other prior art references of record, taken alone or in combination with each other.

Specifically, as previously argued, Ran simply does not teach "track logs", at least not in the sense described in the specification and used in the claims. As stated on page 1 of the present specification:

Track logs are used in navigational aid devices to provide an indication of where the device has been. One description of a track log is an array of points used to track a location of the navigational aid device. Track logs may be visualized as a trail of electronic bread crumbs, where each bread crumb is a track log point that identifies the time and position of the device.

"The present invention addresses problems with track log selection", as stated on page 2. More specifically, as also stated on page 2, "the present invention allow a desired track log to be selected from any portion of a set of track log points so as to provide electronic systems, such as navigational aid devices, with the capability of more powerful

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and flexible applications". "The desired track log is determined, identified, saved, or incorporated into device applications using the actual endpoints and at least one track log point from the set of track log points", as stated on page 3.

For example, suppose a navigation device is used for navigation along several trips. A user of the device may wish to review those trips, which were actually taken, in order to, for example, plan a future trip, retrace their steps, and/or determine where they were at a specific point in time. With the present invention, the user may know, for example, that sometime over last year's labor day weekend they traveled from Kansas City to Branson, Missouri. The present invention can be used to help the user determine which route they took or find a restaurant where they stopped along the way, since the user's navigation device can store that user's "track log" or historical path.

Thus, track logs are purely historical, since they "provide an indication of *where the device has been*", emphasis added, and each track log point identifies a "position of the device" and "the time" that the device *was* at the position. Simply put, a track log, as described in the specification and used in the claims, is an electronic version of Hansel and Gretel's bread crumb trail, with each a track log point, as described in the specification and used in the claims, equating to a bread crumb.

Furthermore, Applicant is unable to find a reference to a "track log" that refers to anything but a history of where someone or something has been. In fact, most any "log" refers to a historical record of some type. For example, a pilot's logbook is a record of where that pilot has been, his flight time en-route, and the date he actually took each trip.

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Therefore, Applicant asserts that "track log" as described in the specification, used in the claims, and described herein conforms to common usage of the term.

In attempting to support his rejection based on Ran, the Examiner simply states that "'track log' means [a] point that identifies the time and position of the device". However, the Examiner appears to be missing an important distinction, in that, as described in the specification and used in the claims, a track log point means a *historical* time and position of the device.

Ran actually teaches away from tracking a device's historical or past time and position. For example, the Examiner supports this rejection by referring to Ran's figures 7A, 7B, and 8. However, Ran describes figures 7A and 7B as illustrating "the origin-based *predictive* travel time maps" and "the destination-based *predictive* travel time maps", emphasis added, respectively. Similarly, Ran describes figure 8 as illustrating "the system architecture of an Internet-based personalized traffic prediction and trip decision support system", emphasis added. Therefore, these figures 7A and 7B shows "predictive" or future times and positions, and are therefore the opposite end of the spectrum with respect to historical or past time and position.

As the Examiner notes, Ran does disclose predicting travel times based, as least in part, on "historical travel times between selected points". However, as the Examiner also notes, such "traffic data [is] typically supplied by each state's Department of Transportation". Thus, the only historical information Ran discusses is essentially average travel times between two points. For example, Missouri's Department of Transportation

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may be able to provide data concerning travel times between Kansas City and Saint Louis. However, such averages, or even aggregations, are simply not analogous to, nor suggestive of, "track logs", as described in the specification and used in the claims. Specifically, for such traffic data to be useful, it would have to assume known and consistent routes, such as straight down Interstate 70, with no stops or other deviations. Furthermore, such traffic data can only reflect a collection of numerous trips involving numerous vehicles, and therefore cannot "provide an indication of where a specific device has been", as the specification defines track logs. Thus, Ran's reference to historical traffic data simply does not teach "track logs", as described in the specification and used in the claims.

Finally, as Ran fails to teach "track logs", Ran also fails to teach other specific claim limitations, such as those related track logs. For example, Ran simply does not disclose "specifying a desired first endpoint and a desired second endpoint *for a desired track log*", "*assigning an actual first endpoint for the track log based on the desired first endpoint and a set of track log points*, and *an actual second endpoint for the track log based on the desired second endpoint and the set of track log points*", and "*identifying the desired track log using the actual first endpoint, the actual second endpoint, and at least one track log point*", emphasis added, as claimed in claim 1. Rather, Ran simply discloses *predicting* travel times along a *proposed route*. As a result, Ran simply does not disclose, suggest, or make obvious the limitations of claim 1.

Claim 2 recites "validating the desired first endpoint and the desired second

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endpoint". Similarly, claim 20 recites "validate the desired endpoints". Thus, both claims 2 and 20 claim validating endpoints of a track log. In contrast, the Examiner can only point to column 19, lines 15-18, which discloses "a plurality of these traffic prediction models 8 are sometimes used simultaneously for an area in order to generate a set of traffic predictions which can be verified against each other". However, as disclosed in column 19, lines 19-39:

The traffic prediction models 8 have two roles: 1) generate estimates of route segment speeds and travel times for the current time instant, and 2) produce prediction of route segment speeds and travel times for future time instants. Currently, the real-time speed and travel time data collected from field devices and probe vehicles only cover a small portion of the entire route segment network, typically major freeway segments in major urban areas. On the other hand, the historical speed and travel time data cover a larger portion of the entire route segment network, typically freeway segments and arterials. Moreover, such historical speed and travel time data are not available for each time of day, day of week, week of month, and month of year. Nevertheless, a significant part of the route segment network will have no historical speed and travel time data. Such route segments include some rural freeways, minor arterials, surface streets, and residential streets. Therefore, it is the role to use the traffic prediction models to estimate the time-dependent travel times and speeds for each route segment for each time of day, day of week, week of month, and month of year.

Thus, Ran only discloses verifying "time-dependent travel times and speeds for each route segment", rather than validating endpoints of a track log, as claimed in claims 2 and 20. As a result, Ran does not disclose, suggest, or make obvious "validating the desired first endpoint and the desired second endpoint", as claimed in claim 2, or "validate the desired endpoints", as claimed in claim 20.

Claim 3 recites "filtering track log points for the desired track log extending between

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the actual first endpoint and the actual second endpoint". Similarly, claim 21 recites "filter track log points for a path extending between the actual first endpoint and the actual second endpoint". For example, the user may be interested in only a portion of a track log, and may therefore wish to filter out uninteresting portions.

In contrast, the Examiner can only point to Ran's column 1, lines 36-41, which disclose:

Internet provided data includes real-time velocities and the number of vehicles per minute traveling selected roads. Over time such data can also supply historical travel times between selected points. Existing systems display maps which indicate road construction or other incidents and show or predict travel time along particular routes or between selected points.

Applicant simply cannot understand how the cited reference anticipates filtering track log points. As a result, Ran does not disclose, suggest, or make obvious "filtering track log points for the desired track log extending between the actual first endpoint and the actual second endpoint", as claimed in claim 3, or "filter track log points for a path extending between the actual first endpoint and the actual second endpoint", as claimed in claim 21.

Claim 4 recites "searching for a nearest track log point that is located closest to at least one of the desired first endpoint and the desired second endpoint that is capable of being specified by specifying a location", "identifying a time associated with the nearest track log point", and "finding an index of the nearest track log point in a time range". The Examiner relies on portions of Ran's disclosure that discuss predicting travel times.

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Specifically, the Examiner asserts that Ran disclosure of "predict[ing] the time it will take a vehicle to travel along a particular route segment" anticipates "Identifying a time associated with the nearest track log point".

However, as discussed above, "a time associated with [a] track log point" is, as described in the specification and used in the claims, the time that a device was actually at a position associated with that track log point. Therefore, a track log point, as described in the specification and used in the claims, is associated with a discrete time and place, rather than any predicted travel time along a route segment. Simply put, Ran's disclosure of predicting an elapsed time along a path does not anticipate identifying a discrete time and a discrete place. Thus, Ran does not disclose "identifying a time associated with the nearest track log point", much less the other limitations of claim 4. As a result, Ran does not disclose, suggest, or make obvious "searching for a nearest track log point that is located closest to at least one of the desired first endpoint and the desired second endpoint that is capable of being specified by specifying a location", "identifying a time associated with the nearest track log point", and "finding an index of the nearest track log point in a time range", as claimed in claim 4.

Claim 10 recites "selecting a method for specifying a time of **at least one track log endpoint**", "specifying desired endpoints **for a desired track log** using one or more of the selected methods for specifying a time of **at least one track log endpoint**", "assigning actual endpoints **for the track log** based on a time for the desired endpoints **and a set of track log points**", and "identifying **the desired track log** using the actual endpoints and

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at least one track log point from the set of track log points", emphasis added. As discussed above, Ran simply does not disclose, suggest, or make obvious track logs, much less discrete times associated track log endpoints or the other limitations of claim 10.

Claim 11 recites "selecting a track log endpoint from a list of track log points that are associated with a time". Similarly, claim 12 recites "entering a time that is used to identify the at least one track log endpoint". Claim 13 also recites, among other limitations not show by Ran, "identifying a time associated with the nearest track log point". Thus, claims 11, 12, and 13 have limitations directed to discrete times, rather than durations, such as Ran's predicted travel times. As a result, Ran simply does not disclose, suggest, or make obvious the limitations of claims 11-13.

Claim 14 recites "receive desired endpoints for a desired track log", "assign actual endpoints for the track log based on the desired endpoints and a set of track log points", and "identify the desired track log using the actual endpoints and at least one track log point", emphasis added. Claim 22 recites "wherein the memory includes a set of track log points" and "wherein the device is adapted to select a desired track log based on a first user-specified desired endpoint and a second user-specified desired endpoint". As discussed above, Ran simply does not disclose, suggest, or make obvious track logs, much less discrete track log points or the other limitations of claims 14 and 22.

Claim 31 recites, among other limitations not show by Ran, "wherein the memory includes a set of track log points", "assign actual endpoints for the track log based on a time for the desired endpoints and a set of track log points", and "identify the desired

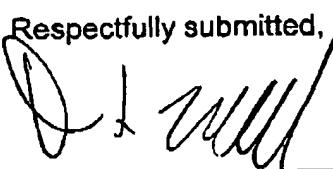
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track log using the actual endpoints and at least one track log point from the set of track log points", emphasis added. Claim 36 recites "display a list of track log points that are associated with a time". Claim 38 recites, among other limitations not shown by Ran, "identify a time associated with the nearest track log point". Claim 39 recites, among other limitations not shown by Ran, "receive desired endpoints for a desired track log", "assign actual endpoints for the track log based on the desired endpoints and a set of track log points", and "identify the desired track log using the actual endpoints and at least one track log point". As discussed above, Ran simply does not disclose, suggest, or make obvious track logs, much less discrete track log points, discrete times associated with discrete track log points, or the other limitations of claims 31, 36, 38, and 39.

The remaining claims all depend directly or indirectly from independent claims 1, 10, 14, 22, 31, or 39, and are therefore also allowable. Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 501-791. In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited.

Respectfully submitted,

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